Distributed optical amplifying apparatus, optical communication station, optical communication system, and optical fiber cable

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- US5778128
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Abstract of **EP1202477**

An optical fiber transmission line including first, second and third optical fibers connected together so that light travels through the transmission line from the first optical fiber, then through the second optical fiber and then through the third optical fiber. The first, second and third optical fibers have first, second and third characteristic values, respectively. The second characteristic value is larger than the first characteristic value and the third characteristic value. The characteristic value of a respective optical fiber being a nonlinear refractive index of the optical fiber divided by an effective cross section of the optical fiber. Pump light is supplied to the transmission line so that Raman amplification occurs in the transmission line as an optical signal travels through the transmission line.

FIG.3